

$\mathcal{H}^{(m)}_0$ and $\mathcal{H}^{(m)}_1$ are the m -th order Hermite polynomials, $\mathcal{H}^{(m)}_0 = 1$, $\mathcal{H}^{(m)}_1 = 2\sqrt{m}\xi$, $\mathcal{H}^{(m)}_2 = 2\sqrt{m(m-1)}(\xi^2 - 1)$, $\mathcal{H}^{(m)}_3 = 2\sqrt{m(m-1)(m-2)}(\xi^3 - 3\xi)$, $\mathcal{H}^{(m)}_4 = 2\sqrt{m(m-1)(m-2)(m-3)}(\xi^4 - 6\xi^2 + 3)$, $\mathcal{H}^{(m)}_5 = 2\sqrt{m(m-1)(m-2)(m-3)(m-4)}(\xi^5 - 10\xi^3 + 15\xi)$, $\mathcal{H}^{(m)}_6 = 2\sqrt{m(m-1)(m-2)(m-3)(m-4)(m-5)}(\xi^6 - 15\xi^4 + 45\xi^2 - 15)$, $\mathcal{H}^{(m)}_7 = 2\sqrt{m(m-1)(m-2)(m-3)(m-4)(m-5)(m-6)}(\xi^7 - 21\xi^5 + 105\xi^3 - 105\xi)$, $\mathcal{H}^{(m)}_8 = 2\sqrt{m(m-1)(m-2)(m-3)(m-4)(m-5)(m-6)(m-7)}(\xi^8 - 28\xi^6 + 210\xi^4 - 420\xi^2 + 105)$, $\mathcal{H}^{(m)}_9 = 2\sqrt{m(m-1)(m-2)(m-3)(m-4)(m-5)(m-6)(m-7)(m-8)}(\xi^9 - 36\xi^7 + 420\xi^5 - 2520\xi^3 + 2520\xi)$, $\mathcal{H}^{(m)}_{10} = 2\sqrt{m(m-1)(m-2)(m-3)(m-4)(m-5)(m-6)(m-7)(m-8)(m-9)}(\xi^{10} - 45\xi^8 + 630\xi^6 - 5040\xi^4 + 15120\xi^2 - 15120)$, $\mathcal{H}^{(m)}_{11} = 2\sqrt{m(m-1)(m-2)(m-3)(m-4)(m-5)(m-6)(m-7)(m-8)(m-9)(m-10)}(\xi^{11} - 55\xi^9 + 945\xi^7 - 10395\xi^5 + 51975\xi^3 - 83160\xi)$, $\mathcal{H}^{(m)}_{12} = 2\sqrt{m(m-1)(m-2)(m-3)(m-4)(m-5)(m-6)(m-7)(m-8)(m-9)(m-10)(m-11)}(\xi^{12} - 66\xi^{10} + 1650\xi^8 - 27720\xi^6 + 242550\xi^4 - 1081080\xi^2 + 1081080)$, $\mathcal{H}^{(m)}_{13} = 2\sqrt{m(m-1)(m-2)(m-3)(m-4)(m-5)(m-6)(m-7)(m-8)(m-9)(m-10)(m-11)(m-12)}(\xi^{13} - 78\xi^{11} + 2730\xi^9 - 55440\xi^7 + 655380\xi^5 - 4552800\xi^3 + 19056600\xi)$, $\mathcal{H}^{(m)}_{14} = 2\sqrt{m(m-1)(m-2)(m-3)(m-4)(m-5)(m-6)(m-7)(m-8)(m-9)(m-10)(m-11)(m-12)(m-13)}(\xi^{14} - 91\xi^{12} + 4290\xi^{10} - 120120\xi^8 + 2070210\xi^6 - 22862100\xi^4 + 147021000\xi^2 - 147021000)$, $\mathcal{H}^{(m)}_{15} = 2\sqrt{m(m-1)(m-2)(m-3)(m-4)(m-5)(m-6)(m-7)(m-8)(m-9)(m-10)(m-11)(m-12)(m-13)(m-14)}(\xi^{15} - 105\xi^{13} + 6930\xi^{11} - 240240\xi^9 + 5544000\xi^7 - 75975600\xi^5 + 655380000\xi^3 - 3527136000\xi)$, $\mathcal{H}^{(m)}_{16} = 2\sqrt{m(m-1)(m-2)(m-3)(m-4)(m-5)(m-6)(m-7)(m-8)(m-9)(m-10)(m-11)(m-12)(m-13)(m-14)(m-15)}(\xi^{16} - 120\xi^{14} + 9000\xi^{12} - 420480\xi^{10} + 12012000\xi^8 - 228621000\xi^6 + 2425500000\xi^4 - 10810800000\xi^2 + 10810800000)$, $\mathcal{H}^{(m)}_{17} = 2\sqrt{m(m-1)(m-2)(m-3)(m-4)(m-5)(m-6)(m-7)(m-8)(m-9)(m-10)(m-11)(m-12)(m-13)(m-14)(m-15)(m-16)}(\xi^{17} - 136\xi^{15} + 12180\xi^{13} - 705600\xi^{11} + 24024000\xi^9 - 554400000\xi^7 + 8316000000\xi^5 - 75975600000\xi^3 + 455280000000\xi)$, $\mathcal{H}^{(m)}_{18} = 2\sqrt{m(m-1)(m-2)(m-3)(m-4)(m-5)(m-6)(m-7)(m-8)(m-9)(m-10)(m-11)(m-12)(m-13)(m-14)(m-15)(m-16)(m-17)}(\xi^{18} - 153\xi^{16} + 15930\xi^{14} - 1058400\xi^{12} + 42048000\xi^{10} - 1201200000\xi^8 + 22862100000\xi^6 - 242550000000\xi^4 + 1081080000000\xi^2 - 1081080000000)$, $\mathcal{H}^{(m)}_{19} = 2\sqrt{m(m-1)(m-2)(m-3)(m-4)(m-5)(m-6)(m-7)(m-8)(m-9)(m-10)(m-11)(m-12)(m-13)(m-14)(m-15)(m-16)(m-17)(m-18)}(\xi^{19} - 171\xi^{17} + 19110\xi^{15} - 1478400\xi^{13} + 70560000\xi^{11} - 2402400000\xi^9 + 55440000000\xi^7 - 831600000000\xi^5 + 7597560000000\xi^3 - 45528000000000\xi)$, $\mathcal{H}^{(m)}_{20} = 2\sqrt{m(m-1)(m-2)(m-3)(m-4)(m-5)(m-6)(m-7)(m-8)(m-9)(m-10)(m-11)(m-12)(m-13)(m-14)(m-15)(m-16)(m-17)(m-18)(m-19)}(\xi^{20} - 190\xi^{18} + 22770\xi^{16} - 1911000\xi^{14} + 105840000\xi^{12} - 4204800000\xi^{10} + 120120000000\xi^8 - 2286210000000\xi^6 + 24255000000000\xi^4 - 108108000000000\xi^2 + 108108000000000)$, $\mathcal{H}^{(m)}_{21} = 2\sqrt{m(m-1)(m-2)(m-3)(m-4)(m-5)(m-6)(m-7)(m-8)(m-9)(m-10)(m-11)(m-12)(m-13)(m-14)(m-15)(m-16)(m-17)(m-18)(m-19)(m-20)}(\xi^{21} - 210\xi^{19} + 28350\xi^{17} - 2541000\xi^{15} + 147840000\xi^{13} - 7056000000\xi^{11} + 240240000000\xi^9 - 5544000000000\xi^7 + 83160000000000\xi^5 - 759756000000000\xi^3 + 4552800000000000\xi)$, $\mathcal{H}^{(m)}_{22} = 2\sqrt{m(m-1)(m-2)(m-3)(m-4)(m-5)(m-6)(m-7)(m-8)(m-9)(m-10)(m-11)(m-12)(m-13)(m-14)(m-15)(m-16)(m-17)(m-18)(m-19)(m-20)(m-21)}(\xi^{22} - 231\xi^{20} + 32130\xi^{18} - 3003000\xi^{16} + 191100000\xi^{14} - 10584000000\xi^{12} + 420480000000\xi^{10} - 12012000000000\xi^8 + 228621000000000\xi^6 - 2425500000000000\xi^4 + 10810800000000000\xi^2 - 10810800000000000)$, $\mathcal{H}^{(m)}_{23} = 2\sqrt{m(m-1)(m-2)(m-3)(m-4)(m-5)(m-6)(m-7)(m-8)(m-9)(m-10)(m-11)(m-12)(m-13)(m-14)(m-15)(m-16)(m-17)(m-18)(m-19)(m-20)(m-21)(m-22)}(\xi^{23} - 253\xi^{21} + 36960\xi^{19} - 3696000\xi^{17} + 254100000\xi^{15} - 14784000000\xi^{13} + 705600000000\xi^{11} - 24024000000000\xi^9 + 554400000000000\xi^7 - 8316000000000000\xi^5 + 75975600000000000\xi^3 - 455280000000000000\xi)$, $\mathcal{H}^{(m)}_{24} = 2\sqrt{m(m-1)(m-2)(m-3)(m-4)(m-5)(m-6)(m-7)(m-8)(m-9)(m-10)(m-11)(m-12)(m-13)(m-14)(m-15)(m-16)(m-17)(m-18)(m-19)(m-20)(m-21)(m-22)(m-23)}(\xi^{24} - 276\xi^{22} + 42120\xi^{20} - 4212000\xi^{18} + 300300000\xi^{16} - 19110000000\xi^{14} + 1058400000000\xi^{12} - 42048000000000\xi^{10} + 1201200000000000\xi^8 - 22862100000000000\xi^6 + 242550000000000000\xi^4 - 1081080000000000000\xi^2 + 1081080000000000000)$, $\mathcal{H}^{(m)}_{25} = 2\sqrt{m(m-1)(m-2)(m-3)(m-4)(m-5)(m-6)(m-7$

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